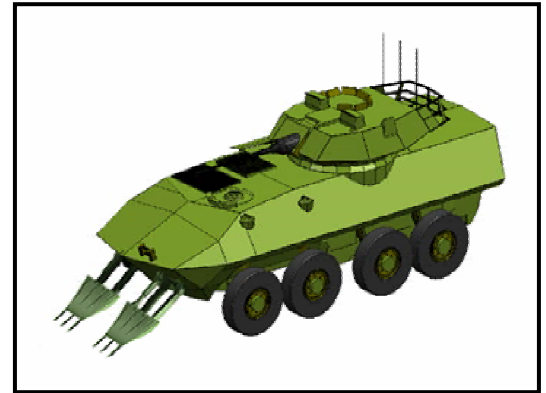


Mine Countermeasures (MCM) Light Armored Vehicle (LAV) Self Extractor

Purpose: To provide an organic capability to MAGTF combat vehicles to perform self-extrication from mine fields to enhance survivability.

Background: The Marine Corps Mine Countermeasures (MCM) Working Group (MCMWG) has requested the Marine Corps Warfighting Laboratory (MCWL) to conduct the concept development, design, fabrication and test of a light-weight attachment for a Light Armored Vehicle (LAV-25) to conduct a hasty breach for self-extrication from a minefield. The attachment is expected to be sufficiently light-weight to induce minimal hindrance to LAV mobility. Concept development will include an analysis of COTS/NDI mine clearance and proofing systems and the design, fabrication and test of System Design and Demonstration model for system level evaluation and experimentation with Marine Corps personnel.



This effort addresses the vital requirement for Self-Breacher/Track-Width Plow identified in the U.S. Marine Corps (USMC) Marine Air Ground Task Force (MAGTF) MCM Master Plan, dated August 2004, and the draft Initial Capabilities Document (ICD) for Explosive Hazard Defeat (EHD). The EHD ICD identifies required capabilities, including “neutralization including breaching, clearance, and proofing.”

Description: Naval Surface Warfare Center, Panama City (NSWC PC) will perform the work by conducting requirements development, system engineering analysis to include mission and system threat analysis, vehicle mobility and integration analysis, an analysis of commercial off-the-shelf (COTS)/non developmental item (NDI) hardware, conceptual development of a system design to include modeling, fabrication and test or the procurement of a candidate or modified NDI system to include its modeling and developmental test. Overall system development will include the development of notional tactics, techniques, and procedures (TTP), an evaluation of the system’s effectiveness in various soil conditions, analysis/limited testing of the system’s survivability to mine activation and experimentation with Marine Corps personnel.

Deliverable Products: Reports and fieldable prototype.

Milestones:

TASK	FY06	FY07	FY08
Project Management	▲—▲		
Engineering & Analysis	▲—▲		
SDD Development and		▲—▲	
LAV Integration		▲—▲	
Test and Evaluation		▲—▲	

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